



# F I E L D N O T E S



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## Letter from the Director

### New Directions for the Matt Cole Memorial Library

Some of you may remember when the environmental studies library was established in the dining room of the Van Rensselaer Mansion in 1971-1972, or its move from there to the back room next to the garage in Park Hall, or its relocation to the cramped Kellogg House porch in 1978-1979. In 1982 the environmental studies library became the Matt Cole Memorial Library in the honor of a gifted member of the class of 1980 whose life was tragically cut short by an auto accident. As part of its 50<sup>th</sup> reunion celebration, the Class of 1943—which included both Matt's father and uncle—augmented the existing Matt Cole Library endowment making it possible to build the handsome addition to Kellogg House that opened in 1995, giving an appropriate home to the collection.

Over the past 5 years there has been substantial growth in environmental literature and information. At the same time, Williams has undergone a consolidation of its satellite science libraries into the magnificent Schow Science Library that opened this fall in the Unified Science Center. These two concurrent circumstances have provided us with an opportunity to facilitate the mission of the Center for Environmental Studies and to move the Matt Cole Library forward into the now proverbial new millennium. We have just hired Norm Parker to be the staff person in charge of the Matt Cole Library (see accompanying sidebar). Norm has been given the directive to aid the College in developing the MCL's focus toward being a resource for students, faculty, and the wider community to gain information about the regional environment



Norm Parker has joined the staff at CES as a database administrator and a supervisor for the Matt Cole Library. Norm will be working to expand the existing online database to include papers authored by past and present students, environmental data from various regional organizations and local meteorological data. He will be dividing his time between CES and Sawyer Library, where he assists in tech support.

Norm is a lifelong resident of Berkshire County and currently resides in North Adams with his daughter, Marissa.

(defined as Western Massachusetts, Southern Vermont, and Eastern New York). At the same time we are moving toward making regional information more accessible through the WWW. We will not only make student and faculty regional research information available in electronic form but, in the near future, we will try to make regional data from other public and private sources available through the CES-MCL website.

Please check in periodically at <http://www.williams.edu/CES/> to see what is new, and in some cases what is old (but important).

Hank Art  
CES Director

## Agricultural Biotechnology Symposium at Williams

A major global environmental issue, agricultural biotechnology is gaining visibility in Europe and, more recently, in the US as well. Genetically modified organisms (GMOs) now make up a significant part of American crops. Corn and soybeans with genes inserted from other species currently account for roughly half the US harvest of these important foods. Milk produced using biotechnology is also widespread in the food supply.

On November 16, CES held a public symposium on agricultural biotechnology at the Brooks-Rogers Auditorium. The audience listened to a lecture by Professor Steven Yearley, chair of sociology at York University in England, followed by responses from Professors Lois Banta (biology) and Eileen Crist (sociology) from Williams, and Dr. Julie Gorte of the Calvert Group, a socially responsible investment firm. The symposium was organized by Dr. Lee Venolia and Professor Kai Lee of CES, who also moderated the discussion.

The symposium provided valuable information on the growing international debate over biotechnology. European consumers have resisted genetically engineered foods, and the European Union now requires labeling of foods containing GMOs. There is no such requirement in the US, where the Food and Drug Administration has concluded that GMO foods, once approved by other federal agencies, should be classed like other foods as generally safe.

Agricultural biotechnology is of potentially great significance in developing countries, Professor Banta

noted, especially if scientists and farmers in those countries can shape new crops to their own needs. Major changes in agriculture of this kind are likely, at least indirectly, to affect the possibility of salvaging the rich biodiversity found in the tropics, particularly in rain forests and coral reefs.

Despite their large presence in the US food supply, there has been no concrete evidence of harm to humans from GMO foods. However, there are preliminary signs that some GMO crops may cause significant ecological damage, harming species that are not pests (such as butterflies). In this, GMOs seem to share many of the unintended consequences of pesticides. As Professor Yearley pointed out, the problem of mad-cow disease in Europe prepared the public there to mistrust government when other, technically unrelated issues like GMOs arose. This is a concrete demonstration of the practical value of credibility, in a time when the authority of both government and science are under pressure from developments in the mass media, politics, and rapidly changing technology.

The symposium was supported by the Class of 1946 Fund for International Environmental Studies, and Professor Yearley's visit was supported in part by the Class of 1960 Scholars program.

Kai Lee  
Rosenburg Professor of Env't. Studies

## A Busy Year at CES

CES has had a busy year, filled with exciting activities. We sponsored a number of events and speakers, each of which drew an audience from among students, faculty, and community members.

On Sunday, February 13, 2000, CES co-sponsored the **Second Annual Non-Profit Career Fair and Alumni Career Panel**, together with the Office of Career Counseling, the Multicultural Center, and the Chaplain's Office. The environmental career panel was made up of six alumni working in a range of environmental fields: **Lydia Vermilye '96**, Political Associate at the League of Conservation Voters in Washington; **Carl Dierker '74**, Regional Counsel for EPA-New England; **Paul Gallay '81**, Assistant to the Commissioner at the New York Department of Environmental Conservation; **Susan Shea '79**, Director of Land Protection for the Green Mountain Club; **Paul Hannan '71**, Director of Conservation for Vermont Housing, and **Jonathan Labaree '85**, Project Manager at the Maine Coast Heritage Trust. The panelists each spent a few minutes describing their current positions and the paths they took after graduating from Williams. Students in the audience were then encouraged to ask questions.

Following the panel, approximately 35 non-profit organizations took part in the career fair. In addition to the organizations represented by the panelists, environmental organizations participating in the fair included The Nature Conservancy and The Quebec-Labrador Foundation.

The Third Annual Non-Profit Career Fair is scheduled for February 11, 2001.

On Thursday, April 6, **Warren Leon**, executive director of the Northeast Sustainable Energy Association presented a talk on "Your Most Important Environmental Choices". Mr. Leon, co-author of *The Consumer's Guide to Effective Environmental Choices*, provided information on which decisions regarding our product consumption we should focus. He said that while people often think about the small decisions, such as using paper or plastic bags at the supermarket, we don't focus as much on the truly important decisions such as what car to buy or in what kind of a house to live. Over the course of a year we may cut back our use of plastics by six pounds by choosing paper grocery bags, while consuming hundreds of extra gallons of gasoline by not choosing a fuel-efficient car. Mr. Leon's message was to think about which of our decisions affect the environment, and then to focus on those that will have the biggest impact.

**David Sanger**, a two time Pulitzer Prize winning Economist for the New York Times, visited campus on Friday, April 14, to discuss the then-upcoming IMF protests and their sister protests in Seattle during the WTO meeting. Speaking to an audience that overflowed from the auditorium, he also touched on the international social ramifications of free trade, and the invisible role average people unknowingly play in sometimes unconscionable international investment. Sanger outlined the development and foundations of our volatile and unstable global economy, explaining what caused the Asian and Latin American crises. He also described how every person investing in a retirement fund or college savings account directly takes part in insidious practices such as currency speculation or other activities that contribute to economic—and therefore social—destabilization of entire countries in the quest for a quick buck.

On Thursday, April 27, CES hosted **Dr. Michael De Cheke**, who spoke on "Civil Action Revisited: Legal, Social, and Scientific Lessons of the Woburn Toxic Waste Trial". Dr. De Cheke is an analytical chemist and environmental consultant whose testimony was central to the famous case described in the book and movie "A Civil Action". In his talk, Dr. De Cheke spoke about both the technical aspects of his analysis for the case, and on the vast social issues raised by the publicity garnered in the national media by this one case. Dr. De Cheke wound up his presentation with a short video of the main players in the real-life Woburn Toxic Waste Trial.

In the late spring we held both an end of year barbecue for current and graduating students, and a picnic for visiting alumni. Turnout for both events was high, and we enjoyed the few beautiful days we had before a long summer of rain.

The fall 2000 semester was no less busy. On Thursday, October 5, we hosted a talk by **Alberto Rivera**, director for the Sustainable Tourism Development Program in Guatemala. His talk, “Paradise for Sale: The Penetration of the Market and the Degradation of the Environment in Lake Atitlan, Guatemala”, looked at how the interventions of humans in Lake Atitlan have, through the penetration of the market economy, resulted in the extinction of species, the deterioration of water quality and the overall degradation of the aquatic and land environments in the Lake Basin. Dr. Rivera is on the faculty of the Higher Education Consortium for Urban Affairs’ Latin America program.



CES alumni (and a few future CESers?) gathered in June to reminisce about the good old days

Also on October 5, CES organized a multidisciplinary panel discussion on population growth. A panel of ten faculty members from the Humanities, Social Sciences, and Sciences considered the importance of human population growth to current social issues and values. The program included opening comments by the panelists, followed by a general discussion.

On Wednesday, October 18, CES co-hosted the second annual forum “**Renewable Energy: Choices for our Environment**”. Organized in conjunction with the Massachusetts Renewable Energy Trust and the Berkshire Renewable Energy Steering Committee, the event featured demonstrations of renewable energy technology as well as an expert panel. A keynote address was delivered by Bill Moomaw of Tufts University. Panelists included Jonathan Fitch of Princeton Municipal Light, Ashley Houston of Xenergy, and Maggie Downey of the Cape Light Compact. Greg Watson from the Massachusetts Renewable Energy Trust moderated the discussion. The audience for the event included over 150 residents of Berkshire County.

Next on the CES agenda was the annual meeting of the North East Environmental Studies Group. This group held its first meeting at Williams in 1985. After meeting in different locations each year, Williams again offered to host the gathering in 2000. Nearly sixty participants from over forty colleges and universities attended this year’s meeting.

The NEES Group meetings bring together faculty and staff from Environmental Studies programs across New England and the northeastern states to discuss the issues that affect our programs. Discussion topics at the meeting included the electronic serving of course information; student-based, community-based, and experiential learning; curriculum development; evaluation and assessment of environmental programs; international programs; and campus sustainability issues. Participants were also invited to take part in field trips to sites such as the Hopkins Memorial Forest, the Pownal (VT) tannery site, the Massachusetts Museum of Contemporary Art in North Adams, and the Greylock Glen development in Adams.

In addition to these events, CES has continued to organize the Log Lunch program each Friday of the academic year. We have drawn speakers from the student body and faculty at Williams, and from local, national, and international organizations. Memorable speakers of the past year include **Georgette Yaindl**, Director of the Connecticut Bicycle Coalition, presenting a talk called “Bikes Save Lives (of people, trees, squirrels . . .)”; **David Kline**, Amish farmer and author speaking on “The Agricultural Imagination”; and **David Zuckerman**, Vermont State Legislator, discussing his views as “Organic Farmer/Legislator: Mixing Activism With Electoral Politics”.

## What's Happenin' In the Forest . . .

It's been over a year since I arrived to undertake the management duties at the Hopkins Forest. Since the last reporting in *Field Notes*, HMF has been an active center for student and faculty research as well as a host for several regular classes and, as usual, a venue for public events and outreach programs.

At the crack of spring, the sugarbush was once again alive with maple sugaring activities. Indeed, the spring of '00 featured favorable weather conditions and we could hardly keep up with the steady runs of sap from the 130 tapped trees. Thanks to several students who defied the call of Caribbean—opting instead to pass parts of their spring break in the sugar house—we were able to produce around 25 gallons of syrup this year; certainly the season presented some moments of adventure for me, one who comes from oak country.

The summer of '00 saw a flurry of research projects in the Forest. Several students collected data from previously initiated studies; among them were **Vivian Schoung '02** and **Jessica Yorzinski** (Greylock High School) who analyzed annual growth ring data from tree cores extracted from permanent plots. During this period, **Kate Alexander '02** and **Christine Palmer '02** spent many-a-day in the increasingly expansive garlic mustard patches of the Forest. Their mission was to quantify the spread of these invasive exotic plants and monitor their interactions with native herbs of the forest floor as part of a three-year-old study by Joan Edwards.

Speaking of tenacious plants, Hank Art and David Richardson initiated a study on the allelopathic effects of the hay-scented ferns (a species that tends to form dense, mono-specific mats beneath canopy gaps) gathered from the forest. Their initial experiment, tended by **Sara Hart '02**, seemed to demonstrate that extracts from this fern do indeed have a growth-inhibiting effect on other herbs.

On to water and rocks: **Will Ouimet '01**, a Geosciences student working with **Prof. David Dethier**,

undertook a study of movement and deposition of sediment within the Birch Brook drainage. This work, an extension of a Winter Study project, will be incorporated into Will's thesis this year.



Some of you may remember the stray cat that made the Hopkins Memorial Forest his home last year. While he was banished from the forest for making himself a nuisance in the Rosenburg Center lab, "Hopkins" has adjusted well to his new home with Rachel Louis, CES Project Coordinator.

As for the Forest's fauna, during a summer long inventory of the amphibians of the Hopkins Forest **Ken-ichi Ueda '03** discovered several sites along the forks of Birch Brook for the spring salamander, a Massachusetts "Species of Special Concern". Ken-ichi also located and surveyed several significant vernal pools that supported reproduction of spring salamanders, wood frogs, green frogs, gray tree-frogs, spring peepers and American toads. In the woods themselves, red-back salamanders and red efts (young red-spotted newts) joined American toads as the more abundant amphibians, while the streams hosted significant populations of two-lined and northern dusky salamanders.

Another study, undertaken by **Kristin Bohnhorst '03** and **Kyle Goodrich '01**, sought to determine the deer population in the Forest. To this end the two Ks traipsed throughout the Forest assessing numerous plots for pellet groups and evidence of deer browse. Their findings suggest that the Forest supports a healthy deer population (as of this printing, final population estimates were still being calculated).

As for “wildlife” of a more civilized nature, the Civilian Conservation Corps and its 1930s occupation of HMF were the subject **Allison Robbins' '01** summer investigations. Allison’s work took her to archives in Pittsfield where she unearthed several photographs of the Rosenberg Center as a CCC barracks of yesteryear. Allison’s and other results of this summer’s research are currently on exhibit in the Rosenberg Center.

The summer season was brought to its ceremonial end with the annual Forest Festival on Sunday, September 24<sup>th</sup>. In addition to highlighting many recent and current research and monitoring activities, this event featured some of the traditional rites of fall in New England—cider pressing and apple butter brewing—as well as the time-honored wood crafts of beam hewing and shake splitting. To the chagrin of many, the canopy walkway had to be closed due to wet, slippery conditions.

Stay tuned for announcements of future HMF events and activities...

Drew Jones  
HMF Manager

## Prizes and Awards



Sarah Connolly '00, recipient of the Hardie Prize, with CES Director Hank Art

CES honored several students this spring for their hard work and contributions to the environmental studies community.

The Rosenberg Prize in Environmental Studies (formerly called The Director’s Prize) was awarded to **Aya Reiss '00**. The \$150 award is given to an outstanding student in Environmental Studies.

The Scheffey Award was given to **Katherine Birnie '00**. This \$100 prize, named for Lewis and Andrew Scheffey (the first director of CES), is awarded in recognition of outstanding environmental leadership.

The Environmental Studies Committee Award, granted for outstanding contributions to the environmental studies community at Williams, was given to **Ethan Plunkett '00**. This award is also in the amount of \$100.

The Tom Hardie '78 Memorial Award was given to **Sarah Connolly '00** for her senior thesis, *The Breakdown of Ecosystem Services: Urban Sprawl and Air Pollution in Santiago De*

*Chile*. The Hardie Award is given each year to the student whose work best demonstrates excellence in environmental studies. The award consists of a 3-color woodcut by **Mark Livingston '72** and the publication of the work as part of a monograph series which is made available at Kellogg House.

## Class of 1960 Scholars Program

### Class of 1960 Scholars Program a Great Success

CES had a very successful first year as a participant in the College's Class of 1960 Scholars Program. With the funding provided by the program, we were able to bring three top-notch speakers to campus during 1999-2000. Each speaker gave a public lecture followed by a seminar for the students selected as Class of 1960 Scholars. The visit wound up with a dinner for the speaker, several faculty members, and the student-scholars.

The first speaker of the year was **Cynthia Lloyd** of the Population Council in New York City. Her visit was briefly reviewed in the Fall 1999/ Winter 2000 issue of *Field Notes*.

During the spring semester two excellent speakers were funded by the program.

On Thursday, April 13, **Prof. Stephen Kellert** of the Yale School of Forestry and Environmental Studies gave a talk entitled "Values of Nature in Human Evolution and Development". The lecture was well attended by both students and faculty from several departments.

Professor Kellert's research has focused on policy and management issues relating the interaction of people and natural resources, mainly wildlife and biological diversity. His current research projects include studies of basic values and perceptions relating to the conservation of biological diversity; methods and concepts for valuing natural resources; environmental education and ethics; the biophilia hypothesis; and connecting natural systems with human values and socioeconomic behavior. He recently completed three books, *Kinship to Mastery: Biophilia in Human Evolution and Development*; *The Value of Life: Biological Diversity and Human Society*; and *The Biophilia Hypothesis*, coedited with Edward O. Wilson. He is currently writing another book, *Ordinary Nature: Exploring and Restoring Nature in Everyday Life*. He is a fellow of Branford College at Yale, has an appointment at the Institution for Social and Policy Studies, and is a faculty affiliate at the Peabody Museum.

Two weeks later, on Friday, April 28, **Ross Gelbspan** participated in the Class of 1960 Scholars Program, presenting a talk entitled "The Heat Is On: The Global Economy Meets the Global Climate". The talk received much attention both on campus and in the community, and was covered in a front-page article in the regional newspaper, *The Advocate*.

Mr. Gelbspan retired several years ago after a 31-year career in journalism as a reporter and editor at *The Philadelphia Bulletin*, *The Washington Post* and *The Boston Globe*. As special projects editor at the *Globe*, he conceived, directed, and edited a series of articles that won a Pulitzer Prize in 1984.

In 1997, he published a book on the global climate crisis titled *The Heat Is On: The High Stakes Battle Over Earth's Threatened Climate*. The book received very positive reviews in *The New York Times*, *Los Angeles Times*, *Boston Globe*, *Minneapolis Star-Tribune*, the science journal *Nature*, and elsewhere. It was excerpted in *The Washington Post*, *The San Jose Mercury* and other outlets. It received national attention that summer when President Clinton told the press he was reading *The Heat Is On*. A U.S. paperback edition was published in as *The Heat Is On: The Climate Crisis, the Cover-Up, the Prescription*.

Since the book's publication, Gelbspan has appeared in numerous radio and television interviews, and published several articles on the topic of global warming. He was invited to the World Economic Forum in Switzerland in February, 1998, where he addressed government ministers and leaders of multi-national corporations.

In the summer of 1998, he and Dr. Paul Epstein, associate director of the Center for Health and the Global Environment of Harvard Medical School, assembled a group of economists, energy company presidents, and policy specialists to hammer out a set of strategies designed to dramatically accelerate the Kyoto process. They were invited to present those strategies at a conference in Buenos Aires last November. As a result of that

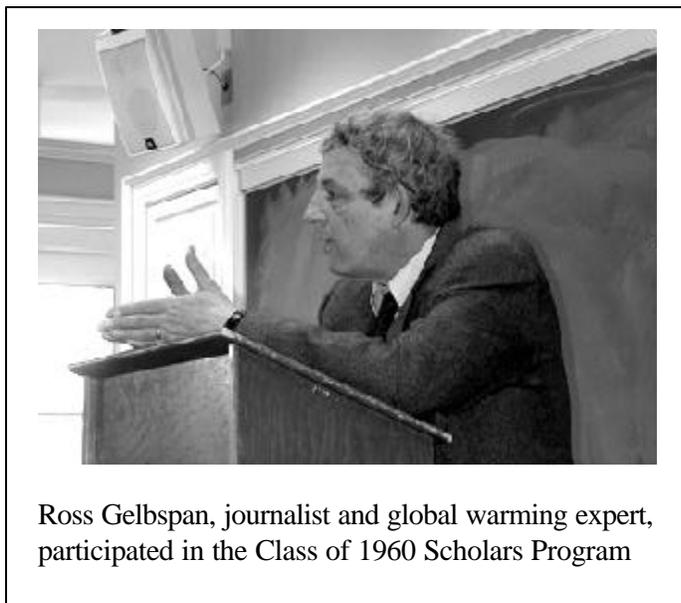
presentation, the United Nations Development Programme invited them to mount a conference on those strategies in Bonn, Germany in June, 1999, during that round of climate negotiations.

Gelbspan received his B.A. at Kenyon College and did post-graduate study at the Johns Hopkins School of Advanced International Studies in Washington, D.C.

CES received funding through the Dean of the Faculty to continue the Class of 1960 Scholars Program in 2000-2001. On Friday, November 17, we hosted a lecture by **Steven Yearley**, Chair of the Sociology Department at the University of York (UK). Prof. Yearley's talk was called "Is Science a Friend of the Earth?"

Prof. Yearley holds a PhD in the sociology of science from the University of York. He worked in Northern Ireland for twelve years before returning to York. He has authored several books, including *Science, Technology and Social Change*, *The Green Case*, and *Sociology, Environmentalism, Globalization*.

We look forward to several more interesting speakers as part of the Class of 1960 Scholars Program in the spring semester.



Ross Gelbspan, journalist and global warming expert, participated in the Class of 1960 Scholars Program

## Summer Intern Reports

At long last, here are the the remainder of the reports written by the students funded by CES for summer internships, research, and creative endeavors in the summer of 1999. Look for the reports written by those funded in 2000 in the next issue of *Field Notes*.

### Taylor Schildgen '00

At some point in our lives, each of us has probably been exposed to the rather curious world of the atomic molecule. We might have some vague sense of what protons, neutrons, and electrons are, and perhaps we'd even remember that isotopes are the same type of atom with differing numbers of neutrons. Some of us might also have heard that there are ways to use the decay rate of particular isotopes over time to determine ages of minerals. But from the simplistic equations sprawled on the chalkboard before us, those

dating methods seem quite intuitive and straight-forward. We never get a sense of all the complications involved in producing a date, all the brilliant discoveries people have made over time in order to develop the methods, and just how difficult it is to obtain reliable ages. For six weeks this past summer, I received a brief glimpse into the intricate, exciting, and hellish world of isotope dating.

I spent my time at Scottish Universities Environmental Research Centre, a laboratory complex funded by five Scottish universities, consisting of several different types of isotope dating laboratories. Over my 6-week tenure, I learned more than I ever thought there was to learn about  $^{40}\text{Ar}/^{39}\text{Ar}$  dating,  $^{14}\text{C}$  dating, luminescence dating, and mineral separations. Fortunately, the cool, drizzly Scottish summer weather offers little to tempt one away from the indoors, and from my instructors who were more than willing to spend 14+ hours a day with me.

Despite the intense working schedule, the exciting research with which I was involved made my time very enjoyable. I worked on an Ar/Ar project dating a large flood basalt recently discovered at the bottom of the Indian Ocean. Some consequences of the eruption of flood basalts have been major changes in the Earth's atmosphere due to all of the gases re-released during lava eruption. The eruption of the Deccan Traps of Siberia, one of the largest flood basalts known, led to the biggest mass extinction in the history of the Earth in which 90% of all species were exterminated — far more thorough than the mass extinction of the dinosaurs 65 million years ago. The flood basalt that I dated was even larger than the Deccan Traps, however it is curiously not correlated with any mass extinction. Other equally intriguing projects included determining the timing of the massive climate-change driven sand storms that decimated farm villages on the coast of Scotland tens of thousands of years ago using luminescence dating techniques, and determining the timing of several major forest fires in a canyon of the Colorado Front Range to see if they were related to climate change using <sup>14</sup>C techniques.

I did get outside of the labs a few times—enough to realize that the biking on little one-lane farm roads of Scotland is far better than any biking I've done in New England; that the botanical gardens in Scotland and England alone are worth a trip across the ocean; and that, with enough practice, I can indeed decipher a thick Scottish accent. It was a fascinating experience, and I thank the Center for Environmental Studies sincerely for providing the funding to have made this experience possible.

### **Catherine Seelig '01**

Last summer CES funded my internship with the Sierra Club in Yellowstone National Park. I spent ten weeks tabling at Yellowstone and Tower Falls to ask park visitors to sign 30,000 postcards as a petition to Bruce Babbitt, Secretary of the Interior, to keep grizzly bears on the Endangered Species List. I can happily report that in December after all of our postcards were in, the Secretary of the Interior decided not to delist grizzly bears for four more years, until they have more habitat protection. Williams alum **Louisa Willcox '80**, who coordinates the Grizzly Bear Ecosystems project in Bozeman, Montana, has been working with

phenomenal energy and dedication to protect grizzly bear habitat for the past twenty years. She warned me about the intensity of western politics over land-use, but I hadn't realized quite how radical the Sierra Club appears out west. Because the Sierra Club has been effective in fighting for roadless areas, reducing snowmobile usage in Yellowstone, and other contentious goals, several people a day would stomp away from our table calling us ecoterrorists or try to enrage us by asking us for bear burgers.

Watching the reactions of thousands of American and international visitors to the idea of protecting grizzly bears was fascinating. Although many of the visitors we tried to interest in signing the petition were apathetic, saying they preferred elephants or giving other less creative excuses, the other half were glad to sign the petition. Many people signed saying they hoped they never saw a bear, while others expected us to reveal the secret hiding place of the bears in exchange for their signatures. Thankfully, still more people were vehement enthusiasts about not only the bears but the vast space they require. While I was staying at Louisa Willcox's house, I met a group of Canadians she had organized to work with her on the Yellowstone to Yukon Initiative. This is an effort to secure vital corridors of land so that grizzly bear populations are not fragmented into ever tinier islands. The Y to Y Initiative is especially important because it emphasizes relying on scientific knowledge and the input of ecologists to plan which land must be preserved to ensure the survival of grizzlies.

Although I had some inkling of western politics before going, I was skeptical when I read the account of a grizzly bear biologist being silenced in the book *Science Under Siege*. The biologist Dave Mattson had data demonstrating how bears avoided roads and other information showing how habitat protection is necessary for bears. Until I got to Montana I thought the description of how the U.S. Fish and Wildlife Service confiscated his files must have been exaggerated. After being out west and talking to Defenders of Wildlife tablers who had received death threats for their petition about Yellowstone wolves, I was quickly educated. I am not trying to make my summer sound more exciting than it was, although hiking around in the Beartooth Mountains was fantastic, but just to say how dramatically being out west changed my perspective on environmentalism. I knew that there was clearcutting in the U.S., but I hadn't

even realized that it happened in national forests. However, I was equally surprised when ranchers were glad to sign the petition to protect bear habitat from development. In one case, a cattle rancher signed the petition because she had experienced more problems with people stealing her cows than she had with bears. Grizzly bear issues are complicated, but I can't wait to be in Glacier National Park this summer where I will be giving campfire talks about bears.

## Elizabeth Wood '00

I'm always happy to reminisce about my stay in Uganda. After my semester abroad program with the School for International Training, my CES summer grant allowed me to extend my practicum/independent study beyond the academic semester. Thus, I spent most of my summer at the Masulita Children's Village, a project of the Uganda Women's Effort to Save Orphans in Masulita, Uganda. My project was partly a chance for me to experience living on my own in a very different place and culture. But it was also a chance to observe and work in an environment specifically designed by mostly upper class Ugandan women to meet the needs of Ugandan children. In order to record and share this experience, I kept a journal of drawings and short essays to describe the people, the landscape and also the design of the Children's Village.

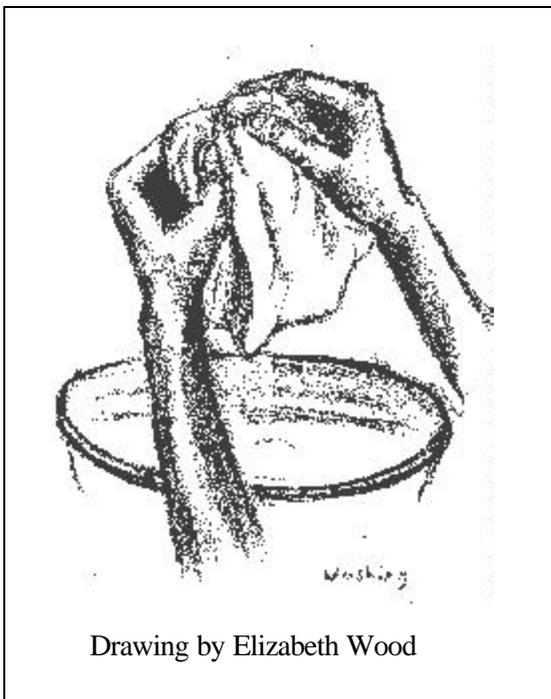
I had a lot of fun with the kids at the Children's Village. All the children there seemed generally very happy. They played together nicely, with older children helping and encouraging the younger children, they were very respectful to adults, and most seemed to do well in school. All of this seemed to indicate the success of the intentionally designed environment in which they were being raised.

The Children's Village is located in rural Uganda and consists of three children's houses, each with a house mom, an administration building, and a farm with two milk cows, goats, chickens, vegetables, matoke (the staple plantain) as well as pineapples, passion fruit and coffee. The choice to include a farm in a home for orphans was,

to me, the most interesting aspect of this design. I spent most of my days working on the farm and planting small kitchen gardens with the children, much to the astonishment of many locals who had not believed that white people did such work. When I asked UWESO's founders, including Uganda's First Lady Janet Museveni, why they had chosen to include a farm as part of the Children's Village they gave a number of answers: food security for the children, giving the children exposure to food production that would be useful for them in the future (85 to 90 percent of Ugandans produce at least some of their own food), and allowing the Children's Village to offset its costs with some income. Usually, the UWESO women were surprised by the question. "In our culture," they said, "it would be silly not to utilize the land."

The UWESO women designed the Children's Village around their own ideals and presuppositions and also in response to the real needs of Ugandan orphans and requirements for life in Uganda with which they were well acquainted. And, from all that I've seen, their ideas work. It was a project which, I believe,

no foreign NGO could have done with as much success. That's not to say that some elements of the Children's Village cannot be imitated in other countries. But UWESO does show that there is no substitute for indigenous knowledge to solve indigenous problems.



## **Chris Spence '00**

Having spent four years in the environmental studies curriculum at Williams, I have been frequently confronted with the question: What do you think nature is? Because the answer to this inquiry has so far eluded the grasp of academic definition, I set forth last summer to figure out what nature means for me, and to convey this understanding in pictures and words. Thus, I aspired to construct a photo-essay which could both develop the elements which define a natural landscape, and display disrupting factors which challenge the “natural” sense of that place. Oddly, the location at which I undertook this endeavor was The Country Club in Brookline, MA. Acclaimed for its natural appearance, yet criticized as an icon attesting to human social, political, and ecological power, The Country Club is the first of its kind in history and is a breathtaking juxtaposition of natural and modified landscape. I have seen few other places at which nature so dramatically imposes upon human transformation, and fights so mightily against it. Thus, I relied heavily on the interface of golf course and nature in order to highlight both the attractors and detractors, or defining elements, of natural landscapes.

My thesis, which arose from this project, holds that nature is purely a matter of perception. Scale, light, frame, moment, context, texture, smell, and sound compose a place; and our senses partake in it. The extent to which a landscape is natural depends heavily on the observer, perhaps even more so than on the observed. The manner in which I observe a place is shaped by my personal history: my Williams education allows me to identify invasive, non-native plant species and patterns of previous land use; my golf course experience draws my eye to plants which may have been nicked by an errant weedwhacker or lawn mower. Such examples, for me, constitute detractors which indicate some form of intrusion into an apparently untamed, or untouched landscape. My tendency toward micro-analysis often diminishes the extent to which a place is natural. On the other hand, I consider large scale, soft lighting, crisp air and a host of other perceptions to be attractors which herald the presence of nature, and invoke in me a peaceful wonder about the world around me.

And so, with the assistance of a CES summer grant, I attempted to document these concepts in a photo essay. I used 400-speed slide film, and processed the images in Adobe PhotoShop before printing them in 8x10 format. The images will be on display in CES during the last week of classes accompanied by excerpts which provoke the observer, and ask him or her to evaluate their own definition of nature.

## **Matthew Toth '00**

Last summer found me on familiar grounds. I was at the Cranbrook School's campus in Bloomfield Hills, Michigan. I was standing outside my house (my father is the professor of photography at the Academy of Art, one of many educational institutions located on the Cranbrook grounds), happily winding a fresh roll of black and white film into a two and a quarter-inch Bronica camera. I was especially happy about winding this particular roll of film in the camera because I had been granted a CES summer grant to conduct a photographic study of Cranbrook and I knew that I could look forward to a long summer filled with creative photography. I would finally have the chance to pursue a life long desire to both learn fine photography from my father, Carl, as well as recognized architectural photographer Balthazar Korab, and to thoroughly explore the potential of Cranbrook as a place.

My study proposed to explore the ways in which architecture and nature interacted aesthetically on the Cranbrook campus, with the pretext of revealing a successful approach to designing with a sensitivity to environment. Cranbrook is a unique place. It is a 350 acre campus that consists of an elementary school, a middle school, an upper school, a graduate art school, an art museum, and a science museum, not to mention a small but thriving community consisting of the majority of the faculty and administration of the schools that reside on the campus. The campus also contains many wooded areas, a lake, and is traversed by a river. The campus is a result of the vision of philanthropist George Booth. He envisioned creating a self-sufficient community of artists and students, where traditions in education and the arts and crafts would be united to produce an ideal educational community. While

the Cranbrook farm was soon disbanded, Booth did succeed in building an educational campus making prolific use of resident artists in the building process, headed up by the Finnish architectural genius Eliel Saarinen. Saarinen designed a series of landmark buildings emerging from the arts and crafts tradition that have an intimate relationship with their natural surroundings (Saarinen even wrote theoretical texts about deriving aesthetic form from nature).

Saarinen's buildings became a launching point for this exploration of community and environment at Cranbrook. Through photography I described a distinction between predominantly architectural and predominantly natural spaces, then attempted to discover how these two spaces interacted in transitional zones, where sculptural mythology often aided a conceptualization of how people live in and relate to nature. One of the most intriguing parts of this project was the way the boundary between the natural and man-made constantly shifted, refusing to be pinned down along a single boundary. Cranbrook was all reclaimed from farmland—almost every tree on the campus was planted or grew after Booth bought the land in 1901. From the old photographs I found while digging through the Cranbrook Archives, it became clear that along the gradient from nature, to planted nature, to natural construction (many of the buildings are made of raw stone) to construction, no permanent delineations could be made. This study produced a show that was in the Wilde Gallery of the Spencer Studio Art Building from March 1 through March 7.

### **Andy Chang '00**

Last summer, **Betsy Wells '00** and I conducted original research in Marine Biological Invasions with Marine Sciences **Professor James T. Carlton**, Director of the Williams-Mystic Program. Summer grants from the Center for Environmental Studies (Chang) and the Biology Department (Wells) funded the majority of our work last summer at Mystic Seaport, CT, and at the Oregon Institute of Marine Biology in Charleston, OR.

Marine biological invasions are much less studied than terrestrial ones, with the exception of a few “poster child” species such as zebra mussels. The first project

of our ongoing research examines the impact of the exotic New Zealand isopod *Sphaeroma quoyanum* on the ecology of the Coos Bay, Oregon area. Our experiments at the Oregon Institute of Marine Biology and at Mystic Seaport specifically measured the isopod's boring rate in several different substrates, including styrofoam and peat. *S. quoyanum* is also capable of boring into rock and wood. Preliminary results indicate that this isopod is capable of releasing significant amounts of styrofoam particles into the marine environment, the effects of which remain unknown. No previous studies have been conducted on the possible ecological impacts of a styrofoam-boring isopod such as *Sphaeroma*. What consequences might the release of millions upon millions of miniscule styrofoam particles have on the marine environment?

Our second project focuses on the role of fishing vessel wet-wells in spreading exotic species from major shipping ports to more remote locales up and down the coast in Long Island Sound. While large ocean-going ships are known to transport thousands of different species around the world on a daily basis in ballast water, little is known about potential secondary dispersal mechanisms. Using the R/V *Star*, a wet-well fishing vessel at Mystic Seaport, we found that while the water inside the wet-well turns over within twenty minutes, 70% of the grass shrimp *Palaemonetes vulgaris* consistently remain inside the well over periods of up to two hours under varying boat speeds. This indicates that smaller marine organisms could possibly be transported significant distances in this manner, and that wet-wells could, therefore, serve as an important coastal vector for marine invasions. Invasions or extinctions of smaller benthic and planktonic species that could be transported via such vessels might have enormous consequences in light of the importance of these organisms at the base of the food chain in the Long Island Sound ecosystem, and of the fisheries it supports. What implications might this have on re-constructing the ecological history of Long Island Sound? What possible ramifications might it have for marine environmental policy?

Work on both projects has continued throughout the school year and will be completed at Mystic Seaport this summer.

## **Alan Brelsford '01**

I spent the summer of 1999 working an internship for the Alaska Bird Observatory at the Denali Institute Migration Station. The Alaska Bird Observatory (ABO) is a nonprofit research organization based in Fairbanks, Alaska, and is primarily devoted to monitoring and studying the songbirds of the boreal forest. The Denali Institute Migration Station (DIMS), established in 1998, is a joint initiative of the Camp Denali eco-tourism lodge and the ABO. It's part of a network of about 10 bird banding stations across the state and 150 nationwide, operated during fall migration to monitor populations and migration timing. Most of these stations are run by federal agencies such as the US Forest Service, Fish and Wildlife Service, and National Park Service, but DIMS is a unique collaboration between a tourism business and a nonprofit foundation.

Located on the property of Camp Denali, DIMS is near the end of the Denali Park Road, a six-hour bus ride from the park entrance. It's situated on the banks of Moose Creek, which cuts a narrow valley through the Kantishna Hills and funnels large numbers of migrating birds into a tight corridor — an ideal spot for a banding station. We set up ten mist nets (6'x30' nylon nets designed to catch birds) and left them open every non-rainy day from 6 AM to 1 PM. We checked all the nets every half hour, and carried any captured birds back to the station. We marked all birds with a unique numbered aluminum leg band and took several measurements to help determine age and sex before releasing them. Occasionally, groups of guests from Camp Denali would visit the station, and we'd explain the purpose of bird banding, the history of the station, and our methods.

Our capture rates in 1999 were about half the previous year's, and since this was only the second year of operation we have no way of knowing which year is "normal" and which is an anomaly. We banded 767 birds of 30 species, including Wilson's Warblers, White-crowned Sparrows, Dark-eyed Juncos, Orange-crowned Warblers, and Swainson's Thrushes. Most of these birds winter in the Southwest US, Mexico, or Central and South America. I learned a great deal about bird banding over the course of two months; by the end of the season, Suzanne (the other intern) and I could

operate the station without any assistance from our supervisor.

Besides being a great learning experience, working at DIMS was a lot of fun. Camp Denali is in a beautiful place, and I had plenty of off-days to go hiking and explore the Alaska Range. The ABO is a good organization to work for, and treats its interns well. Internships with ABO or DIMS are a great way to acquire some field research skills and see some of Alaska's wild lands. For more information on the Alaska Bird Observatory, see their web page at <http://www.alaskabird.org>.

## **Angela Lankford '00**

Environmentalists come in two major camps: one global and based on the power of government and other major institutions; the other local and based on the power of small, individual effort. Disenchanted with the former, I applied for a CES grant to experiment with the latter. I got it and went home to work in a small nonprofit devoted to improving the health of the mountains and the community of the area.

Home is the Wet Mountain Valley of Southern Colorado, at the base of the Sangre de Cristo Mountains. The organization is the Sangre de Cristo Mountain Council. It was founded in 1992 by my father, with the general goal of providing optimal health for the Mountains. This goal was to be reached through encouraging citizen involvement by way of three broad mechanisms: first, education and appreciation events like slide shows and hikes; second, dialogue among various users and between users and the forest service with an eye toward effecting policy; third, direct action like trail maintenance.

For a healthy four years, he and the eight other board members organized hikes, slide shows, all day educational forums, trail cleaning days, a newsletter, and heated discussions. About 200 people joined and paid dues. In 1996, arguments between board members over the future course of the organization lead to an emotional dissolution. For two years, nothing happened. In the summer of 1998, I became acquainted with the organization and took over running it with a friend of mine. That summer, things went slowly. We organized

just one hike, an annual meeting, and a newsletter. We learned the ropes of organizing, advertising, and publishing. At the end of the summer, I was elected president of the three-member board consisting of my friend, my dad, and me.

The CES grant for what I termed a “creative internship” in the summer of 1999 allowed me to spend the whole summer concentrating on the Mountain Council. Working alone most of the time, I planned a summer full of events. Nearly every week, either a hike or a less active event took place. We went to the Sand Dunes, hiked over the crest of the range and ate dinner on the other side, and held a forum about changes in land management designations over the whole range. I published two newsletters on issues facing the Mountains, like the spruce budworm infestation and controlled burns. The events were well attended and people were energetic. The greatest success of the summer was that we gained two board members who helped to broaden our ideas and provide a way to sustain the organization through the time that I am away at college or otherwise exploring other options for my life.

The summer was a very successful one for me, and I learned an immense amount. Mostly, I learned about taking a leadership position. I went into the experience doubtful about my own credibility, and expecting essentially efforts to overthrow me. On the contrary, I found people living in a small town eager to help in any way they could but fearful of taking the responsibility of leadership. I would find myself leading meetings of 70 adults. Having them listen to me was a surprising and energizing experience.

Their willingness to listen and even to do the things I asked was quite reasonably exciting, but it has become apparent that there is a down side. When neither I nor my dad (who is also capable of delegating tasks) is active in the organization, nothing at all happens. We have still not found a way to give self-motivation, and the organization is completely dependent on having a leader. I am tied to it by my ability (an ability that still surprises me) to lead. If I leave, nothing will happen. In important ways, my experiment in local action has been more than an experiment. The people I worked with are real, and do not disappear when the summer ends the way papers do after reading period is over. The question I now ask is: do I leave the organization and continue exploring other methods of helping the environment, or do I follow the clear path currently laid out for me in the Sangre de Cristos?

## **Sarah Connolly ‘00**

I spent the 1999-2000 school year studying in Santiago, Chile. As part of my study abroad program, I conducted a semester-long research project about Santiago’s air pollution problem. Thanks to a Mellon grant from CES, I was able to stay in Santiago for 5 weeks following the end of my program and continue my research. I focused my topic and developed the project into the basis for my senior honors thesis.

Santiago is a city that, much like Los Angeles, California, is located in a valley. This location causes many problems in terms of pollution because pollutants emitted from factories and automobiles (among other sources) cannot escape from the basin. The high concentrations of pollutants in the valley compromise human health, especially in the winter months. Santiago is a rapidly developing urban metropolis that has attracted over one-third of Chile’s population. Growth of the city has been marked by sprawl—dispersed, low-density expansion of settlement. In the course of my research, I became interested in how this sprawling growth pattern is contributing to the air pollution problem. As I met with government officials and interviewed experts from the local universities, I discovered that many Santiaguinos blame the deregulation of the Chilean economy under the seventeen-year military dictatorship of Augusto Pinochet for the deregulation of the urban land market, the unrestrained growth of Santiago and the subsequent increase in air pollution.

By studying Chilean census records and urbanization rates for various sectors of the city, I was able to discover that the horizontal expansion of Santiago is a process that predates Pinochet. With this fact in mind, I turned to look at historic urban policy attempts to create urban growth boundaries and compared them to current government policies aimed towards controlling sprawl. In light of the fact that policies intended to limit expansion

have been proven inappropriate for Santiago, and given that the factors driving urban growth have been continuous for the past seventy years, I would suggest that current government initiatives to set urban limits will prove unsuccessful. Therefore, I recommend that the government concentrate on increasing democratic participation within Chile. In order to do this, the government needs to increase informational transparency and address issues of inequality that are at the heart of choices to live in the periphery of the city.

## Farewell to Roger

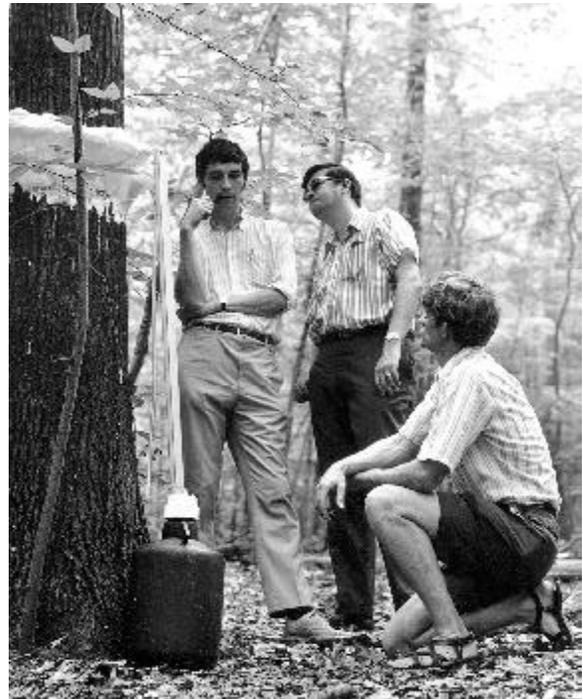
### Have Been Here a Long Time

Rachel Louis asked me to write a few words on the occasion of my retirement from teaching at Williams. The title “Have Been Here a Long Time” is from my (self) introduction at a recent Log Lunch; having only a few seconds at my disposal, I said simply: “I’m Roger Bolton, I’ve been here a long time and I know a lot; come see me, Fernald House, first floor, southwest corner.” Kai refers to it as one of my occasional Gary Cooper moments—the only time anyone has compared me to Gary Cooper.

It occurred to me I might look back on the remarks I made at the 25<sup>th</sup> anniversary celebration of the Center in 1993 and repeat some, amend some, add some.<sup>1</sup> I dwelt on three lasting themes in the Center’s history: our continued relationship with the Economics Department at Williams; our role in helping shape responsible advocates for environmental protection; and our “multi” character. They are not the only important themes in our history, of course, but three that are especially important to me and thus seem worth commenting on now, as in 1993.

The Economics Department and the Center have cooperated since the Center’s beginning, with several economists teaching courses in environmental economics and sustainable development and also teaching in the multidisciplinary courses in environmental studies. Just as one example, lately I’ve been teaching (again) in the required environmental planning course. In many cases the Economics Department generously donated the time of its faculty. I hope that as a result of the collaboration environmental studies students have learned the value of economics—and economists—and are less prone than some students, perhaps, to dismiss economists as the enemy and less likely to confuse them with business people.

And even if a few students—I can think of one or two—never came to appreciate the economic point of view, at least they were forced to become acquainted with it and thus to be a bit better prepared for the guerilla warfare that political activity often resembles.



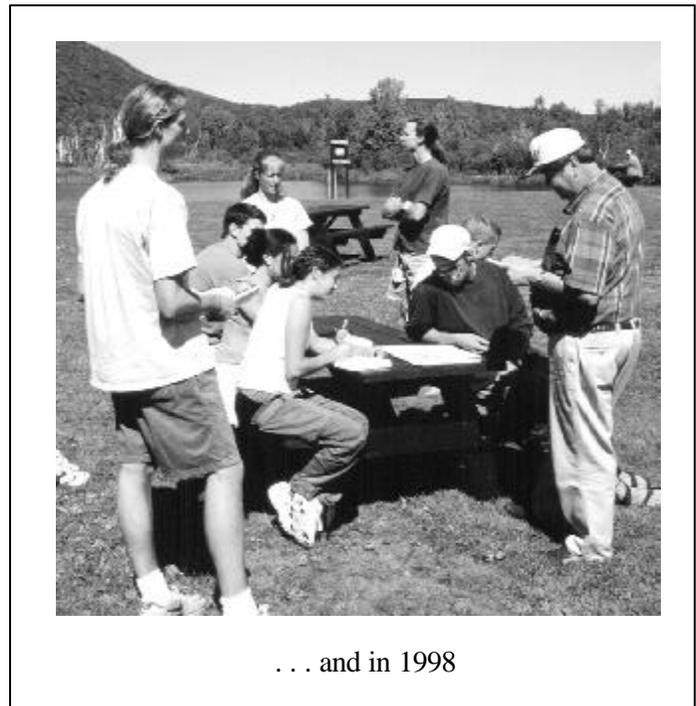
Roger Bolton with students in 1971

The Center has had a vital role in educating students for effective advocacy. Three things are necessary for effective advocacy, I think: *passion, experience, and credibility*. The first two are easy; the third takes some doing, and the Center has played its part. Credibility requires several things: a coherent personal philosophy, with a clear sense of the ethical dilemmas that are unavoidable; an interest in more than one thing—more than recycling alone, more than birds alone, more than solar energy alone; some knowledge of science and technology; and finally involvement, at least in some stage of life, in a local community. Involvement in a local community helps one understand the global community. Our faculty have had a long history of involvement in public affairs in Williamstown and Berkshire County affairs. We have done a good job, I think, in providing role models for our students and in enriching our courses with relevant examples.

Finally, the Center has always been “multi” in many ways—in disciplines, modes of education, characters. It has been involved in an amazing array of things: a diverse set of courses, including an explicit geography course at Williams (my own “Regions of America,” which was an Environment course—and not an Economics course—in the early years of its existence); an experimental forest; a branch library—the only one of the so-called “departmental” libraries that survived recent consolidations on campus; a forest garden; field-oriented WSP’s; GIS; a great number and variety of internships; composting; its own alumni network; a cookbook, only one of a wide variety of special publications.

And, of course, a kitchen.

Most important of all, of course, the people. They have given the Center a “sense of place.” I should not try to mention the wonderful folk I’ve had the pleasure of working with—should not, because surely I’d forget, quite unintentionally, some of them. But I can’t resist mentioning a few—intended only as a “sample”! Sheafe Satterthwaite, and Hank Art, and Nan Jenks-Jay, as a sample of the faculty I taught with in the classroom. Pat Wilson, who helped all of us so well for so long, and Sandy Zepka, who is still here helping us and whom I first hired for Williams in 1987. Tom Jorling, whom I also hired, sort of, since I was the chair of the Committee on Environmental Studies that hired him as Director, in the 1970s. (I hired good people, you see—I “hired” Morty Schapiro, after all, being chair of the Economics Department when Williams first hired *him*!)



I’m really not leaving—while I’ve retired from teaching, I continue to be a member of the Committee on Environmental Studies and of the library subcommittee, and some of us have plans to make the library a more useful resource for the people of our region as well as for Williams students. I am working on several research projects relating to the sense of place, that phrase that suggests the special quality that certain groups of people, including the Center, have for each one of us.

So . . . come see me, still.

<sup>1</sup> Some passages are taken verbatim from “Thoughts from Two Decades and for the Future,” *A Journal* (annual of the Williams College Center for Environmental Studies), 10, 1993, pp. 28-29.

## Alumni Corner

### Alumni Notes

**Elizabeth Titus '75** recently accepted a position as Evaluation Manager at the Northeast Energy Efficiency Partnership, a non-profit organization that advises electric and gas utilities.

**Linda Hansell '80** is currently working as the executive director of an urban-suburban school partnership program in Philadelphia. Their mission is to develop cultural competence and appreciation of diversity among elementary and middle school students from the city and the suburbs. The PARTNERS Program works with 1,800 students each year.

**Maggie Mumford '80** reports that she is no longer practicing medicine. She is currently teaching environmental science, biology, and chemistry at the Holderness School in New Hampshire and loving it.

**Jonathan Labaree '85** writes “We at Maine Coast Heritage Trust recently moved our office a mile down the street to an old mill overlooking the Androscoggin River in Topsham. Our new address is: MCHT, Bowdoin Mill, One Main Street, Topsham, ME 04086. The phone number remains the same: (207) 729-7366. Please stop by! In late spring, I joined a few USFWS staff to count eider duck nests on a protected island in Muscongus Bay and was delighted to find Laurie Munroe (also '85) part of the team. My wife, Lalla Carothers, and I had lots of fun at my 15th reunion, catching up with old pals at the sumptuous CES lunch.”

**Peter Zeeb '85** writes that he joined a consulting company called GeoSyntec last August, and is working to build a groundwater hydrogeology consulting practice in the New England Area. The office has grown to 12 people, and he's always looking for good candidates.

Peter writes “My wife Bethany and I continue to be completely enchanted with our son John Diego, currently 2 ½ yrs old. John Diego came home to us from Guatemala in August of 1998. His sister is on the way— hopefully before the end of this year. Our life is dominated by balancing parenting and demanding jobs, so there is nothing too exciting to report in the extracurricular category!” Peter can be reached at PZeeb@geosyntec.com

**Nancy Mehlman '91** was married in April at a beautiful spot overlooking the Hudson. She's a tax attorney in Manhattan and living in Brooklyn.

**Anne Platt McGinn '91** gave birth to a son shortly after Y2K. Anne writes that “despite its preparations, the hospital still managed to lose power mid-way through my labor, something our mid-wife shared with us (thankfully!) only after the fact. I am now enjoying the constant juggling act of parenting and working full-time.”

**Nadine Block '93** is still working (going on 2+ years) at the Pinchot Institute for Conservation, a non-profit organization in Washington, DC, that provides research and policy analysis on forest conservation issues. Nadine reports “My current focus is on large-scale private forestland transactions, and the subsequent opportunities for conservation. Speaking of trees, the Alumni Association in DC recently organized a tree-planting day in Maryland, where Ephs planted 100 trees! CES alums in attendance included myself, Tom Kimbis '93, Bill Mowitt '93, and Christy Johnson '92.”

**Caroline (Mahon) De Carvalho '95** writes “Since graduation until June of 1999, I had been taking courses, attending workshops and seminars and working on the land: first in Kansas, practicing holistic range management as a grazier on a 10,000 acre ranch, and then in New Mexico, coordinating programs and editing a newsletter for the Permaculture Drylands Institute; revegetating land, harvesting water, controlling erosion, designing and installing gardens with my own business; and doing some natural building, Ba-gua, tracking, art and music making on the side. A year ago last spring, I met my husband Saul while visiting a rainforest agroforestry project and friends in Manaus, Brazil. Nine months later, we got married. We have been living in Manaus since. And I’ve been working with Saul in his small business, perfecting my Portuguese, doing some translation, designing and implementing a tropical community garden and composting project with Saul, learning about the flora and fauna of Amazônia, keeping house, and now expecting a baby in mid-January, 2001.” You can reach Caroline at <carolinemahon@yahoo.com>.

**Elizabeth Bluhm '95** is moving to North Carolina as an intern in internal medicine. She has been involved in some occupational therapy and environmental medicine research.

**Mike Montag '95** has just finished his first year of a two-year masters program at the Yale School of Forestry and Environmental Studies. This summer he is working at the Worldwatch Institute in Washington, DC.

**Emilie Grossmann '96** has started work on her PhD at the University of Wisconsin, Madison, in the Department of Forest Ecology and Management. Her project is still in its formative stages, but she knows that she’ll be studying soils and prescribed fire in the Northwest Wisconsin Pine Barrens. Write to Emilie at <ebgrossmann@students.wisc.edu>.

**Tim Billo '97** just finished a fabulous year of environmental education on Washington’s Olympic Peninsula. He’s now in the process of transitioning to graduate school. You can reach Tim at <timbillo@hotmail.com>.

**Deb Zucker '97** writes: I returned to the Aprovecho Research Center (in Cottage Grove Oregon) in May after spending the Spring with my parents (when I was ill). I did a variety of things this summer for the program including teaching some classes (ropes course, food preservation, nutrition, assisting in herbal medicine and some gardening classes), milking the goats once a day, working in the garden, and now grant-writing. I have just moved off-site, and will be working part-time for Aprovecho most likely September through May doing grant-writing for a little over half of my hours, and teaching classes, occasionally milking the goats, and helping out in various other ways for the rest of my work-time. I got a part-time job with an after school program at a middle school here in town. I’ll be doing activities related to the community garden, recreation, outdoor education, etc. with the kids. I am now living a few miles away from Aprovecho in a house with friends. It is beautiful wooded land with three homes on it, a community garden area, a stream, a swimming pond, an outside bath-tub, composting toilets, and a place to have animals (we’re going to get chickens at least!). My new address and phone number are: 78590 Echo Hollow Lane, Cottage Grove, OR 97424. (541) 767-9604.

**John Plowman '00** is working for the summer at The Mountain School in Vershire, VT. He writes “I associate with sheep, cows, geese, pigs, turkeys, a horse, and several hundred young meat chickens. Several humans also. I will be moving to the San Francisco Bay area in the fall where the seeds of secession will be sown hopefully culminating in peaceful withdrawal from the union sometime around when George W. takes office.”

**Please send in updates for the Alumni Notes section of the next issue of *Field Notes*.**

## Alumni Listservers

CES manages two listservers for the benefit of our alumni. CESJOBS-L is for posting information on environmental jobs and careers. CESALUMS-L is for discussion of issues that are of interest to the subscribers. Both lists are open to all interested individuals, and all subscribers may post to the lists.

To subscribe, send a message to: listproc@williams.edu leaving the subject line blank. In the body of your e-mail write: subscribe <listname> <your name> (substituting the name of the list and your name for the < > and what's between them).

To unsubscribe from a list send the message: unsubscribe <listname>

## How You Can Help CES

There are several ways that we look to our alumni for help. Throughout the year we are looking for internship and employment opportunities for current students. If you know of appropriate summer or permanent positions please send them to us.

Another way you can help is to write an article for a future issue of *FieldNotes*. Have you been conducting interesting research? Has your job or personal life led you to exciting regions of the world? Is there an environmental issue that you feel passionate about and want to share your opinions? If so, please write a short article that will be read by well over one thousand CES students, alumni, and friends.

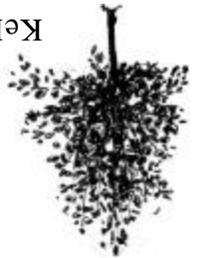
Articles, alumni notes, job listings, and any other correspondence can be sent to Rachel Louis at Rachel.Louis@Williams.edu or by snail mail to Kellogg House. The CES staff can also be reached by phone at 413-597-2346.



Deer tracks in the Hopkins Memorial Forest

Kellogg House, Williams College, P.O. Box 632, Williamstown, MA 01267 <http://www.williams.edu/>

# The Center for Environmental Studies



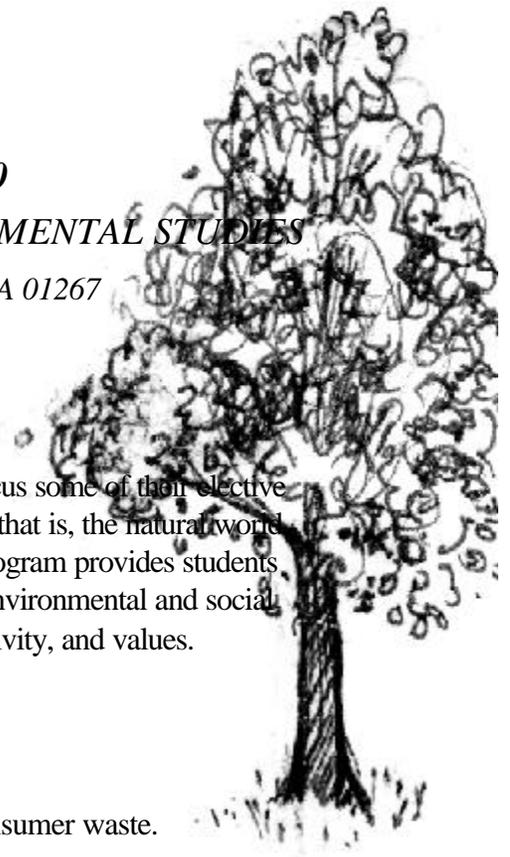
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*FIELD NOTES, Spring/Fall 2000*

*A PUBLICATION OF THE CENTER FOR ENVIRONMENTAL STUDIES*

*Williams College, P.O. Box 632, Williamstown, MA 01267*

The Williams program in environmental studies allows students to focus some of their elective courses in an integrated, interdisciplinary study of the environment—that is, the natural world both in itself and as it has been modified by human activity. The program provides students with the tools and ideas needed to engage constructively with the environmental and social issues brought about by changes in population, economic activity, and values.



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